# SISIAI Siment



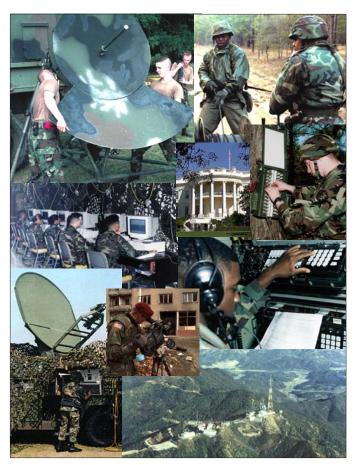


"The technology that is at the center of Transformation is Information Technology. A network centric capable force is one that is robustly networked, fully interoperable, and shares information and collaborates by means of a communications and information infrastructure that is global, secure, real time, reliable, internet based, and userdriven," -- Donald Rumsfeld, Secretary of Defense

The U.S. Army Signal Regiment is leading the nation's defense into the 21st century with rapid and reliable information systems and services. To do this, we need smart, innovative, highly motivated officers, warrant officers, and enlisted Soldiers to make it happen, and allow the Army to attain information dominance to the fullest extent. Technology is growing faster than we ever could have imagined, and career opportunities in the Signal Regiment for capable young men and women are wide open.

The Signal Regiment played a vital role in Operation Iraqi Freedom, with Signal Soldiers everywhere on the battlefield and the war to ensure America's victo communicate with the latest networks. equipment used by world-class Soldiers, led by the finest Signal leaders - you. Our mission - why we join our ranks - is to ensure we achieve victory wherever sent and try.

Being a member of the Signal Regiment will also prepare you for



The Signal Regiment supports the warfighter in many ways: mobile satellite, cable and wire connections, telecommunications, automation, Presidential communications or combat camera.

acterized by an Information Technology structure barely imaginable now. Because of the phenomenal growth of the power of the computer, things such as the worldwide web, multimedia, distance learning, and many other IT-based capabilities, will transform the way we live and the way we fight and win our nation's wars. Success on the battlefield throughout the globe, supporting can occur only with leaders skilled in the use of Information Technology. Regimental officers are trained to manage tory. The next ten years are critinetworked information and telecommunications systems, cal as we continue to transform our and Regimental officers can specialize in engineering and Army into one envied for its ability management of information systems and communications

The 21st Century presents tremendous challenges for the Signal Regiment because our Regiment will lead the Army into the New Information Technology Age. This need the best and the brightest to booklet briefly describes who we are, what we do, and why we need YOU. The Signal Regiment offers fantastic opportunities for young men and women seeking mental and whenever called upon by our counphysical challenges. We're an organization rich in heritage and with an exciting and dynamic future. We take pride in the contributions we've made, and in the role we're playing, and will continue to play, in ensuring our country's life in the 21st century, one char- freedom and safety. We want you to join us.

\* The Signal Regiment is one of the largest and most diverse branches of the Army. Its mission is to provide worldwide information systems and networks for real-time command and control of Army, joint and combined forces.

With the transformation of today's Army to a modular force, Signal officers encounter unpredictable challenges that test their tactical and technical abilities. Along with these challenges, however, are tremendous opportunities for advancement and personal satisfaction. From the foxhole to the White House, Signal officers plan, install, integrate, operate and maintain the Army's strategic, operational and tactical information-systems infrastructure. This includes communications and computer systems and networks, as well as information services and re-

sources supporting wartime and peacetime operations.

As members of the Signal Regiment, Branch (BR) 25, Signal, officers work together with Functional Area (FA) 24, Telecommunication-Systems Engineering, and FA 53, Information Systems Management, officers to provide seamless, secure, continuous and dynamic information systems at all levels - from the fighting platform to the sustaining base - supporting Homeland Defense, the nation's Global War on Terrorism and the Army, joint, Defense Department, combined and coalition warfighting missions with allied nations. Also key to the Regiment's work are its enlisted Soldiers and warrant officers.

## Signal officer's role

Today's Army is vastly different from the Army of ten, and even five, years ago. The Army operates in a daily joint environment and this environment is connected by a global information network where everyone from senior leader to the squad leader relies on timely information to make decisions.

Signal officers manage signal units engaged in installing, operating, administering and maintaining wide-area networks and information systems supporting tactical,



the world. When you hear the words, "We are ready to receive," uttered by a Presidential Communications Officer before the President's arrival, you know that the very best in personnel, equipment and effort has been provided to the President of the United States.

theater, strategic and sustaining base operations. As commanders, Signal officers plan, coordinate and supervise training, administration, operations, supply, maintenance, transportation, security activities and resource allocation for Signal units and facilities.

Signal officers also serve as technical advisers by providing detailed technical direction and advice to commanders, staffs and other command, control, communications and computer (C4) users at all echelons on installing, operating and maintaining distributed database systems, teleprocessing systems and data communications supporting battlefield automated systems.

Signal officers are typically assigned to maneuver units, such as infantry or armor battalions and brigades, as primary staff officer, S6, and technical adviser to the commander. With technology's advancements and the Army's initiatives such as the Brigade Combat Teams (BCT), network-centric operations and the Army's transformation to modularity - the S6's role has become increasingly critical in providing the right information to the right individuals at the right time.

The S6 provides non-signal units linkage to the wide area network, WAN or the global information grid, GIG. As



A Signal officer communicates via radio mounted in a high mobility, multipurpose wheeled vehicle, or humvee. Signal officers are responsible for state-of-the art digital voice, imagery and data distribution systems and networks from combat net radios, local area networks and wide area networks to satellite systems that span the globe.

the S6, Signal officers ensure that voice and data connectivity between higher, lower and adjacent units is secure and reliable. S6s are also responsible for planning, employing and operating state-of-the-art digital voice, video, imagery and data distribution systems and networks from combat net radios, local-area networks and WANs to satellite systems that

span the globe.

With the reorganization to a modular force the Signal Regiment's G6 organization replaces the traditional signal battalion to provide a more robust and responsive organization capable of planning, engineering and providing communications to any various mix of organizations. The key Signal position at the Division level is now the G6. The G6 is responsible for the network and ensuring that it can meet the needs of the combat commander.

Signal officers also serve in a variety of other positions such as:

- Platoon leaders, company commanders, supply and maintenance officers, operations officers, executive officers, other staff officers and battalion/brigade commanders within Signal units:
- Staff and joint duty officers at major command, Department of the Army and Department of Defense levels, planning, managing and operating information systems around the world;
- Action officers, branch and division chiefs in Training and Doctrine Command to develop doctrine, organizations and equipment for the Signal mission area;
- Instructors, small group leaders (SGL), and training developers at



1LT Richard Kaiser checks PFC Amy Waugh's work in a 93rd Signal Brigade training exercise at Fort Gordon, Ga. Signal officers serve in a variety of leadership and staff positions.

The Signal experience 1LT Joshua Paul Beard, Platoon Leader Operation Iraqi Freedom 2 Convoy Support Center (CSC) Cedar II, Iraq Reserve Officers Training Corps, U.S. Military Academy, Officer Candidate School University of North Carolina at Pembroke, BA in history "I deployed as the area node platoon leader for C Company, 67th Signal Battalion, to Iraq and Kuwait. This job was the most challenging and rewarding endeavor of my life. Our mission in Iraq was twofold. First, secure and nonsecure voice and data service was provided to permanent and transient units at Convoy Support Center Cedar II in southcentral Iraq. My platoon conducted a seamless relief-in-place with our sister unit, the 63rd Signal Battalion, installing a single-shelter switch to provide voice/data services. My Soldiers and non-commissioned officers went to work immediately improving conditions and the quality of service. "CSC Cedar II is unique in that an endless flow of transient units require temporary service as opposed to fixed units located at forward operating bases. Regardless of the size of the unit or the length of their stay, the battlefield commanders were given necessary services to be successful. Weekly meetings with Information Management Officers and signal representatives from units passing through the CSC helped with this. The second, equally important, portion of our mission was the commercialization of the tactical services we provided using Signal shelters. Our goal to replace all the tactical equipment, from 10 Kw generators to multi-channel TACSAT shelters, with commercial off-the-shelf equipment, resulted in a more capable network equipped, operated, and maintained by civilian contractors. My platoon completed the

the Signal Center, other branch schools and combat training centers;

process in mid-July 2004, resulting in CSC Cedar II being the

first base in Iraq to be entirely commercialized.

- Signal instructors at pre-commissioning programs such as Reserve Officers Training Corps (ROTC), United States Military Academy at West Point (USMA); and, at other service Signal schools and colleges; and
- Signal advisers to U.S. Army Reserve and Army National Guard organizations.

## Signal Regiment in action

As mentioned earlier, Signal officers work together with their Regimental functional area counterparts (FA 24 and FA 53 officers) to provide seamless, secure, continuous and dynamic information systems at all levels - from the fighting platform to the sustaining base - supporting Army, joint and combined warfighting missions. In particular, Signal officers

coordinate, plan and lead Signal teams that provide the information-systems operations piece (installation, operation and maintenance) of the information exchange; FA 24 officers engineer the networks (telecommunication and data communication) portion of the information pipeline; and FA 53 officers manage the information systems (mostly computer systems and local area networks LANs) to ensure needed information is provided to the right decision-maker.

Signal Regiment officers combine technical and tactical expertise to provide decision-makers with communications, data and other multimedia instruments to gain information dominance on the battlefield. They integrate information systems — military and commercial — terrestial, airborne and space based — that provide realtime data to higher, lower, and adja-

cent units almost simultaneously. Whether it's through video teleconferencing, Joint Network Node tactical communications, satellite, fax, email or commercial access, Regimental officers ensure the information gets to the right place at the right time.

## Regiment's functional areas

FA 24 is a functional area in the information operations career field IOFC. Telecommunication-systems engineering officers provide the Army with a core of professional engineers to support the nation's full-spectrum-dominance strategy for the 21st century. FA 24 officers engineer, design, develop, install, implement, integrate, test, accept, and upgrade telecommunication systems and networks supporting Army, joint, combined, and DoD operations worldwide. FA 24 officers must have a Bachelor or Master



SPC Brian Gavin of 55th Combat Camera Company transmits digital images from Haiti to the Joint Combat Camera Center using an Inmarsat transceiver. The Signal Regiment's combat camera soldiers provide images to commanders-in-chief in the Pentagon for near-real-time information.



Operation
Restore Hope
in Somalia
required 63d
Signal Battalion to think
"light" and
stay mobile
with pack
radios; here
soldiers take
a short rest
on a mission.

PFC Robert Siddell of 1st Signal Brigade checks a commander-incharge virtual office system he just finished setting up at Camp Casey, Korea, during Exercise Foal Eagle. The CINC virtual office, an example of Signal Regiment automation support on the battlefield, is a secure communications device capable of sending secure messages and telephone calls anywhere in the world.



of Science degree in electrical engineering, telecommunications engineering, math, physics or a related discipline.

FA 53 is also a functional area in the Information Operations Career Field. Information-Systems Management Officers provide the Army with a core of professional managers to support the nation's combat and strategic operations for the Global War on Terrorism. FA 53 officers plan, manage, administer, maintain, and protect, information technology systems, networks, and associated resources supporting Army, joint, combined and DoD operations worldwide. Also, FA53 officers may apply computer and software configuration management theory and principles to design, develop, install, implement, integrate, test and accept computer hardware, software, systems and networks.

Officers from all branches who meet specific undergraduate education requirements are eligible for career field designation into either FA 24 or FA 53 as captains during their fifth through tenth year of service. Upon selection into either functional area, captains attend extensive technical training followed by an assignment within their FA.

FA 24 and FA 53 officers compete only against other officers in the IOCF for promotion to major, lieutenant colonel and colonel. Officers who CFD FA 24 or FA 53 will single-track in the IOCF and receive successive follow-on assignments within their FA. Only BR25 officers assigned to the operations career field are eligible to command Signal battalion, brigade or higher level commands or to serve as a division G6.

"The Signal Center located at Fort Gordon, Ga., is the home of the Signal Regiment. All members of the Regiment, Signal branch and functional area officers from all basic branches look to the Signal Center for their professional development and career management guidance."

 MAJ Alprentice Smith, FA53 Personnel Proponent Manager Office Chief of Signal U.S. Army Signal Center Fort Gordon, Ga. The Signal experience



Coalition executive liaison, Combined Task Force C-6 Cobra Gold 2002 Sattahip, Thailand

"At U.S. Army Pacific, Fort Shafter, Hawaii, I usually serve as an Area of Concentration 25A and Functional Area 53A automation management officer for the G-6, Tactical Support Division of 516th Signal Brigade. However, for about five months I had the chance to serve as a translator - among other jobs -

during the annual exercise Cobra Gold. Cobra Gold deploys about 21,000 Soldiers, Airmen, Sailors and Marines from the U.S., Thai and Singapore militaries in the largest exercise held in the Asia-Pacific region. I had never participated in an exercise of that magnitude before.

"I was born in Thailand and lived there until I was 14, so I served as a communications liaison between American and Thai communicators,

> helping lift the language barrier. Part of being the coalition executive liaison involved developing a dialogue with the Royal Thai army and Thai telephone-service providers. I also arranged and conducted two technical communications tours and exchanges between U.S. and Thai communications personnel. For the first time, U.S. personnel were allowed to tour a Royal Thai army strategic-communications facility. I was also able to couple my Thai language knowledge with my data-

The challenges are real; the mission is global; the opportunities are limitless.

พื้นแปซิฟิก รับผิดชอบเกี่ยวกับระบบคอมพิวเตอร์ทั้งหมดของ

หน่วยๆ ซึ่งได้เข้าร่วมฝึก "คอบราโกลด์ 02" ทำให้มีโอกาสกลับบ้าน

ก็ด หลังมารดาพาครอบครัวย้ายไปอยู่สหรัฐ ตั้งแต่อายุ 14 ปี



กุมระบบคอม

12/12/2002

14 F F

สุดยอดหญิงไทยร่วมฝึกคอบราโกลด์รับหน้าที่คุมระ คอมพิวเตอร์ชื่งเป็นหัวใจของ "หน่วยพทารบกสหรัฐปร ภาคพื้นแปซิฟิก" ยึดคติชีวิต "ผู้ชายทำได้ผู้หญิงต้องทั่ว เผยชีวิตดั่งนิยายหลังแม่เลิกกับพ่อ ก็พาลูก 4 คนตระเวร รับจ้างขักผ้าในแคมป์และพบรักกับทหารอเมริกัน เ อพยพไปอยู่เทกซัส

communications knowledge in developing a coalition website that had Thai and English pages. I was able to establish an interoperable tactical network, including an integrated voice switching system, to hold the first-ever Thai-to-American videoteleconference.

"But it wasn't all communications work. I was interviewed several times to publicize Cobra Gold, including an article in the Bangkok Post about me. And I had a pleasant surprise when my uncle and aunt drove for 13 hours from Nakhon Phanom to see me. At the end of the exercise, I was able to spend several days' leave in Bangkok, visiting friends and relatives and shopping."

"Regardless of your academic major, you'll find the Signal Regiment to be a rewarding, challenging branch. The skills you'll develop in professional schools and on the job are more critical today than ever before as the Army enters the Knowledge Age.'

-- LTC Steve Bullock, former Signal Corps branch representative, U.S. Military Academy, West Point, N.Y.

## Career as a Signal officer

Most Signal lieutenants attend the Signal Officer Basic Course (SOBC) at Fort Gordon, Ga., then are assigned to Signal companies and detachments to gain troopleading experience and to enhance technical and tactical competence.

Lieutenants should expect to serve in company-level positions to develop leadership and Signal skills and, when appropriate, to complement this with staff experience at battalion level. Typical developmental positions include platoon leader, company executive officer, company operations officer and Signal battalion staff officer.

The focus during this phase should be on acquiring and refining troop-leading, coordination, logistics, and administrative skills, as well as the branch-unique technical skills required to plan, install, operate and maintain signal equipment and systems. In addition to branch-unique tasks, Signal lieutenants should also become proficient in common core tasks. Before promotion to captain, officers should possess an excellent knowledge of Signal operations and a basic knowledge of combined arms principles. This includes practical experience in Signal activities and missions and in tactics and combined arms operations.

Some basic branch Signal officers are selected for detail in combat arms branches during their first several years of service. These officers obtain invaluable operational and leadership experience that serves them well throughout their careers. After returning to the Signal Regiment, branchdetailed officers should attend the Signal Branch Qualification Course (SBQC), at Fort Gordon and obtain experience in

The Signal experience

CPT Maya Filbert Reserve Officers' Training Corps University of Hawaii Bachelor of business administration in finance

Commander, A Company 1110<sup>th</sup> Signal Battalion Fort Detrick, Maryland

"The Signal Regiment has provided me unequaled opportunities to remain on the cutting edge of technology. During Operation Desert Storm, I provided division communications support in Southwest Asia. While stationed in South Korea, I was in charge of communications for Patriot missile batteries protecting U.S. and allied airbases. Currently I am a company commander in a strategic Signal battalion at Fort Detrick. This unit provides 24-hour continuous communications support through the Defense Satellite Communications System to the National

Command Authority, Department of Defense and Joint Chiefs of Staff. Also, we have the JCS-directed contingency mission in the event of catastrophic failure to any satellite terminal around the world. These assignments have all contributed to keeping me well-rounded by allowing me to tap into continuously changing technologies. Soon I will be getting another opportunity to expand my knowledge and experience when I take command of the Army's only active combat camera company. I am excited to be moving into the field of visual information, providing warfighting commanders-in-chief tactical visual information documenting ground, sea and air operations. I look forward to more challenges as the Signal Regiment takes huge strides into the 21st century.



operational Signal assignments. After completing SBQC, the Army develops detailed officers in the same manner as their non-detailed lieutenant counterparts.

Officers generally return to Fort Gordon to attend the Signal Captains Career Course (SCCC) at approximately their fourth year of service which corresponds closely with promotion to captain. SCCC is attended either TDY and return, TCS, or PCS based on the needs of the Army and follow-on assignment. Captains must aggressively prepare for and seek the skills and experience that will qualify them for promotion to major. Following the SCCC, it is recommended that Signal captains serve as either a company commander or as a battalion S6.

Signal captains continue to gain an in-depth understanding of combined arms operations and become proficient in both Signal branch and common core tasks. These skills provide the foundation required to effectively serve in the branch as a leader at company, battalion, and higher levels in all aspects of signal operations and leading Signal Soldiers. Captains gain a working knowledge of command principles; battalion-level staff operations and combined arms; and signal operations at battalion, brigade and higher levels.

According to Army needs, some Signal captains may be assigned to jobs such as branch immaterial generalist positions (U.S. Army Recruiting Command staff, Reserve Officers Training Corps instructor or Active Component/Reserve Component duty); functional area (FA), positions; and advanced civil schooling (based on branch, FA or overall Army requirements).

Selected Signal captains may undergo a voluntary career field designation (CFD) board. This board decides in which career field each officer is best suited to serve. Signal officers may seek assignment into one of the four career fields under the Officer Personnel Management System (OPMS): operations, information operations, operational support and institutional support. This board will occur several times during an officer's service as a captain. Upon promotion to major, all officers will develop and compete for promotion only within their final designated career



CPT Stephanie Allen, right, and 1LT Glenn Kim, both of 93rd Signal Brigade, brief their deputy brigade commander, LTC Janet Zimmerman, on communications' status in a line-of-sight radio van.

field.

All Signal captains should aggressively prepare for and seek positions of increased responsibility that will provide development in both technical and leadership skills. Promotion to major requires performing as either a nonsignal battalion S6 or as a company/detachment commander. Other developmental positions include battalion or brigade principal staff officer and staff officer positions within the G6 at higher levels.

Captains can expect to spend up to three years on station and should serve 18 months or more in one or more critical developmental positions. Typical developmental assignments include: S6, non-signal battalion; company, detachment or rear detachment command; Signal battalion/brigade/theater command staff; Signal staff officer at MACOM/HQDA/joint/multinational/DOD level; Combat training center observer/controller (CTC O/C); Instructor/combat developer, TRADOC school/USMA; and AC/RC support.

Signal majors should continue self-development efforts to become an expert in all aspects of signal coordination to include joint and multinational operations. Key assignments for a Signal Corps major include: Brigade Combat Team S6; major-level company commander; network operations officer;

Deputy G6 staff officer; and operations officer, S3, or executive officer (XO), of a Signal Battalion.

Key Signal assignments for lieutenant colonels include G6, battalion command; brigade S3 or deputy commander.

Key Signal branch-qualifying assignments for colonels include brigade command; Training and Doctrine Command system manager; garrison command; or colonel level G6.

## Generalist assignments

Officers above the rank of lieutenant can expect to serve in assignments that may or may not be directly related to the Signal branch but which are important to the Army. These positions are used to fill Army requirements as well as to integrate officers into the total Army concept. Examples of such positions are inspector general; ROTC assistant professor of military science; or aide-de-camp.

## Joint assignments

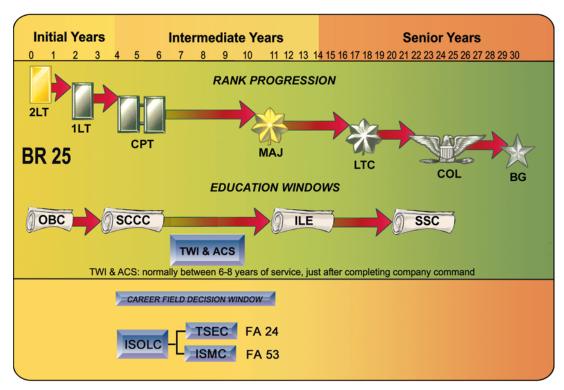
Signal officers can expect to be considered for joint duty assignments worldwide. Joint experience with Air Force, Navy, and Marine counterparts is important to the Army and is essential to individual officers for their advancement into senior leadership positions.

## Special assignments

Signal officers may be assigned to organizations and duties beyond those indicated earlier. These other assignments may include White House Fellows; duty with the National Security

lite, multiplexing and network routing. In addition to classroom instruction, officers participate in a field training exercise to reinforce Signal platoon leader and S6 staff officer-related training. The FTX is a culminating event and

tending their career course. The career course for FA 24 officers is the Telecommunications Systems Engineering Course (TSEC), and for FA 53 officers it's the Information Systems Management Course (ISMC).



Windows for a Signal officer's career. Timeframes for promotions shown at top of chart, while windows for attending Signal officer Basic Course, Signal Captain Career Course, Intermediate Level Education, and Senior Service College are shown below. Between six and eight years of service fall opportunities to attend Training with Industry and advanced civilian schooling. Between the fourth and tenth year of service, officers make a decision on whether to become Functional Area 53 or 24 officers. If so, they attend Information **Systems Operations** Leveler Course, then another course depending on FA.

Council or United Nations; as well as Signal branch representatives at allied service Signal schools. The spectrum of possible assignments is large, but these assignments can all be characterized as highly responsible and important, requiring mature, skilled officers.

## Signal officer training

To accomplish its mission, the Signal Regiment provides newly assigned Signal Lieutenants the military leadership and technical training they need to fulfill the communications and information systems operational requirements of their first several assignments.

Most of this training is conducted at the Signal Center, Fort Gordon, Ga., in the Signal Officer Basic Course. SOBC is 18 weeks and covers Army common core subjects: military leadership, combat operations, organizational logistics and maintenance support. The course also includes Signal-specific instruction in electronics, information technology, tactical radio operations, tactical satel-

"Rite of Passage" tailored to make lieutenants employ the combat and Signal operational concepts and skills they learned throughout SOBC.

Signal officers normally return to the Signal Center for advanced training after they complete their first or second assignment around the 4<sup>th</sup> year of service To build on skills learned as lieutenants, officers attend the Signal Captain Career Course. The SCCC is 18 weeks long and it provides training that prepares officers to successfully command Signal companies and detachments and to serve in staff positions at battalion, brigade and higher levels.

The Signal Center also provides advanced technical training to officers (Captains and Majors) and Army civilians selected to work in Functional Area 24, Telecommunications Systems Engineering, and FA 53 Information-Systems Management. Officers selected for an initial FA 24 or FA 53 assignment must attend the Information Systems Operations Leveler Course before at-

In addition to attending career courses, officers may achieve their Master of Science degree in a discipline related to their branch or functional area. As officers progress through their careers, they may receive other branch, functional area or other Army-unique educational opportunities based on their performance of duties, educational background and the Army's needs.

The Army has restructured the Command and Staff College (CSC) career courses for field grade officers into Intermediate Level Education (ILE) program that consists of the Command and General Staff Officers Course (CGSOC) common core and separate branch or functional area courses tailored to the needs of each career field. All officers selected for Major complete the common core. All Signal officers will complete the CGSOC Core followed by the Army Operations Warfighter Course (AOWC) at Fort Leavenworth, Kan. Most FA24 and FA53 officers will complete the CGSOC Core and the TSEC or the

ISMC at Fort Gordon. ILE is approximately 10 months for all the Regiment's BR25, FA24 and FA53 officers.

Selected senior Lieutenant Colonels and Colonels may attend the Senior Service College to prepare them for service at the senior executive level.

## Optional training

At different times during their careers, Signal officers get the opportunity to further develop leadership and combat functional skills in the three-week Airborne course and/or nine-week Ranger course. Currently a Signal officer must be slated for a Ranger assignment to be eligible for the Ranger course. Officers are also eligible to attend the Special Forces Qualification Course, Air Assault Course and/or Jumpmaster Course when assigned to units that use this specialized training.

## Functional training

All Signal officers are eligible to

attend more training to prepare them for jobs requiring extensive knowledge of specific systems or disciplines. Some of the courses available are:

● Battlefield Spectrum Management Course - 10 weeks of training designed to teach future frequency spectrum managers a variety of skills required for allocating and regulating management of the radio frequency spectrum.



A Signal officer refreshes her skills in training at the Signal Center.  $\,$ 

- Joint Task Force Systems Course - nine weeks of training on planning and managing communications-computer support networks for joint warfighters.
  - Director of Information Man-

agement Operations Officer Course two weeks of training on the six functional areas of information management as they pertain to systems within garrison, sustaining base, power projection and split-based operations.

- RBECS/Joint CEOI Course two weeks of training on standardized instructions and associated computer hardware required to manage the joint battlefield electronic CEOI system used in joint operations.
- Joint Tactical Automated Switching Network Supervisors Course - nine weeks of training on designing, managing and troubleshooting joint tactical communications switched networks.
- Mobile Subscriber Equipment Systems Control Center Operator Course - five weeks of training on operating and maintaining the MSE system control center effectively.
- Standardized Communications Security Custodian Course - two weeks of certification training on safeguarding, accounting and controlling communications-security material.
- Tactical Signal S6 Course four weeks of training that prepares officers for assignment as the battalion or brigade S6 or member of the S6 staff within a tactical combined arms unit. Signal officers, and FA 24 and FA 53 officers are eligible to attend more training to prepare them for jobs requiring knowledge of specific systems or disciplines. Courses available are:

The Signal experience
MAJ Kelly Knitter
Reserve Officers Training Corps
Monmouth College, Monmouth III.
Bachelor of arts in sociology
Operations officer, 86th Signal
Battalion, 11th Signal Brigade
Operation Enduring Freedom, War on
Terrorism, Afghanistan

"Our humanitarian effort began when a Soldier visited a children's hospital to fix a generator. After the Soldier returned from the hospital, he told the command how bad the conditions were. Children were sleeping on the floor, they had no toys and they needed





- Local-area networks: concepts and configuration - two weeks' basic knowledge of network terminology, devices and configurations.
- Introduction to routers one week of training on the fundamental concepts of routers and routing, including communication protocols and interfaces to WANs; configuring routers; and connecting LANs and WANs with routers.
- Introduction to webpage design four days of webpage design and administration basics.
- Network manager (Internet protocol networks) one week of training designed to train soldiers in the fundamental concepts of managing a network consisting of LANs and interfaces to WANs.
- System administration Solaris one week of training on the knowledge and skills required to perform the duties of a systems administrator within a tactical Internet working environment.
- Systems administration NT one week of training on the "core" knowledge for supporting Microsoft Windows NT operating system version 4.0.
- Systems administration Windows 2000- one week of training on the "core" knowledge for supporting Microsoft Windows 2000 operating system.
- A brand new course which relects the fielding of leading edge communications equipment is the Joint Network Node (JNN) Planners Course.

Signal officers are also eligible to attend a variety of information-technology subcourses when assigned to positions that require more specialized training.

# Civilian education and Training with Industry

Not only are Signal officers provided many opportunities to serve in highly visible positions, they are also offered opportunities to attend fully funded graduate school and to train with civilian industry to enhance their skills in information systems operations.

## Advanced civilian schooling

Opportunities for selection to the Army's fully funded graduate-level educational program are available to officers interested in pursuing advanced degrees. Graduate degrees are normally offered in areas that fill Army needs as well as support an officer's professional-development requirements.

Graduate degrees that support the Signal Regiment include information-systems management; telecommunications management; information-technology management; joint command, control and communications; computer science; electrical engineering; computer-systems engi-

neering; and software engineering. A limited number of advanced degrees are offered in other disciplines based on Army requirements.

The Army's cooperative degree program enables selected officers to complete degree requirements concurrent with and following attendance at certain military courses. After completing a military course that qualifies for graduate credit, participating officers are granted up to six months of permissive temporary duty to complete degree requirements as a full-time student.

Officers who pursue advanced degrees on their own may apply for the

## The Signal experience

CPT Jennifer Salinas Reserve Officers Training Corps University of Guam Bachelor of arts in psychology

Communications-electronics systems engineer U.S. Army Signal Command Fort Huachuca, Ariz.



"I was a member of the 51st class (Class 98-99) to graduate from the Training with Industry program at Boeing's Information Space and Defense Systems, Seattle, Wash. TWI is one of the best and most diverse Army education programs available. This is a unique opportunity for officers and civilians to work with an industry leader like Boeing in the effort to improve understanding and communications.

"Each student departs the program enroute to a job that will use his or her newly gained knowledge and experience. But while in TWI, one key to success and an enjoyable time in the program is involvement. You are part of the firm and your ideas, assistance and contributions are important. The reward for your efforts will be the knowledge and experience you gain through working with a highly competitive company. TWI gave me the opportunity to expand my knowledge and experience in data and networking technologies. I took more than 40 hands-on technical classes on data and network concepts, methodologies and technical specifications. Boeing paid for all the educational costs, plus any travel done for Boeing business purposes.

"TWI's main purpose is for the student to gain practical knowledge and experience about industrial procedures, processes and practices unavailable through formal civilian or military courses. During your TWI assignment, you could be involved in many different jobs/projects, depending on factors such as depth of the job, your experience level and an understanding between you, your mentor and your job sponsor.

"The Army can further assist you to enhance and broaden career opportunities for training credit and possible technical certifications with distance learning and computer-based training. Opportunity is out there. Now that you know where to look, don't wait for opportunity to knock on your door! Talk with your Signal representative/professor of military science."

Army's degree completion program, which allows up to 12 months to complete the degree at no cost to the government.

# Signal Regiment Graduate Education Program

The Signal Regiment graduate education program (SRGEP) is a partnership between the University of Maryland University College and the Signal Center that provides members of the Regiment (Soldiers, civilians, and family members) the opportunity to pursue a graduate degree in an information technology field.

Degrees offered are Masters of Science in computer systems management, telecommunications management, information technology and technology management. Members of the Regiment can take these degree programs online worldwide. Courses are delivered in an asynchronous mode so students don't have to be online at a particular time of day to participate.

The SRGEP also offers resident technology information technology graduate seminars at Fort Gordon. Seminars are 10 weeks and meet on Saturdays. A student who completes one seminar earns six graduate credits towards several of the degree

programs. Seminars are scheduled throughout the year and coincide with most Signal Officer Basic Course, SCCC, FA 24 and FA 53 courses. Tuition rates are low and Soldiers can use various programs such as tuition assistance and GI Bill to pay for all or part of the tuition.

More information can be found at www.gordon.army.mil/ocos/edu.

## Training with Industry

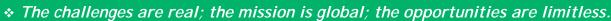
The Training with Industry program was initiated in the 1970s in response to the Army's critical need for officers with state-of-the-art skills in industrial practices and procedures not available through military or civilian education programs. The first students participated exclusively in programs supporting the development of material-acquisition and logistics-management related skills. Today the TWI program has evolved to include training programs supporting marketing, public affairs, artificial intelligence, physical security, finance, computer science, IT, tactical Internet and many other fields.

The Army's main objective in sponsoring TWI is to develop a group of Soldiers experienced in higherlevel managerial techniques and with an understanding of how their industry relates to specific functions of the Army. Once the TWI student is integrated back into an Army organization, he or she can use this information to improve the Army's ability to interact and conduct business with industry. Participants may also be exposed to innovative industrial management practices, techniques or procedures that may apply to and benefit the Army. A prime example of this would be the Signal Regiment's Warfighter Information Network, an architecture designed to use commercial-off-the-shelf equipment in fielding the 21st century's tactical and strategic communications systems.

The Signal Regiment tailors its TWI program according to the Army's needs in the extremely dynamic and constantly evolving communications and information systems field. Some industry training sites for example are: General Dynamics, Taunton, Mass.; CISCO Systems Inc., Herndon, Va.; Raytheon, Fort Wayne, Ind., Dell Computers, Round Rock, Texas; Microsoft Corporation, Redmond, Wash; Electronic Data Systems, Plano, Texas; and many others.



A rainbow over East Timor greets Signaleers serving on the international forces during Operation Stabilise.





A commo van and antenna can change an empty spot into a communications relay. The Signal Regiment's mobile communications capability can create commo links anywhere in the world.

## The Signal experience



2LT Bryan D. Paige DSN (302)580-1301 Platoon Leader Operation Iraqi Freedom III, AI Asad Air Base, Iraq A/327th Signal Battalion (Airborne), 35<sup>th</sup> Signal Brigade (Airborne) Reserve Officers Training Corps, Georgia Southern University Bachelors of Science in Economics

PLT Bryan D. Paige OSN (302)580-1301 Platoon Leader

"While deployed to Operation Iraqi Freedom III (OIF III), I served as platoon leader and site officer-in-charge for a forced entry switch and extension section at AI Asad Airbase. We installed, operated, and maintained communications equipment to provide internet and phone services to the 561st Corps Support Group, the 236th Area Support Group, and other units as they arrived on location. AI Asad Airbase primarily serves as a Marine headquarters, but the Army is developing it into a Supply Support Activity (SSA) that provides supplies of all classes to units west of Baghdad.

"There was very little information known up front about the units, the level of support required, and the type of environment in which we would be living and working. After arrival on site we immediately applied our priorities of work. We established communications with our higher headquarters in Baghdad, then our primary tactical communications link for voice and data, and made contact with the subscribers. As it turns out, both units had been on ground for no more than a month or two, so we were all figuring it out together.

"The greatest challenge that we faced was being far removed from our higher headquarters that we could only receive parts by air or by convoy. This meant greater outage time for the customers while we waited for help to arrive, especially if the part was no where to be found in country. This also meant greater risk to our unit as people moved between locations. This provided my greatest

(Left) 2LT Paige and SPC Fuentes provide customer support to 561st CSG automation NCO SSG Gallagher and SPC Storey.

(Below center) 2LT Paige and SGT Hilton on board a Marine CH-47.



(Below)2LT Paige, SSG Moore, SGT Girard and SGT Pearson prepare for convoy operations in Al Asad, Iraq.

opportunity for customer interface and for exploring other options to expand the network. I had plenty of time to gain an understanding of how much our network meant to their capability to conduct business. Without us, subordinate elements didn't receive word of necessary movement, nor were they able to effectively communicate with their higher headquarters. It also meant that life support services – food, water, power, heat, and air, would not run properly.

"A great lesson learned from this was that NCOs truly make things happen. We, as officers coordinate, plan, and prepare the troops for missions, but NCOs are the ones on the ground, pushing the troops, doing all the hard work that makes overall mission execution possible. Without them I would not have been able to do my job, which was to perform customer interface and provide them with the necessary time they needed to get their mission accomplished.

"During the accessions process prior to graduation from college and my commissioning, I selected the Signal Corps as my first choice. I knew that the technical experience it would provide would keep me on the cutting edge of technology. Without a communications or technical background to rely on, I had quite a challenge learning everything there is to know about Signal - a worthwhile challenge that I overcame. Being Airborne and on jump status has only enriched the experiences that I have had, preparing me for any challenge that life has to offer."

# 1911al Regiment ... Act



Ft Richardson, AK

1 SATCON Bn Colorado Springs, CO



101 AASLT Sig Ntwk Opns Ft Campbell, KY



CONUS Scott AFB, IL



10 Mtn Sig Ntwk Opns Ft Drum, NY



21 Sig Bde Ft Detrick, MD 302 Sig Bn 114 Sig Bn



CECOM Ft Monmouth,

DISA Global NOSC



29 Sig Bn Ft Lewis, WA



1115 Sig Bn Ft Lewis, WA



11 Sig B de Ft Huachu ca, AZ 40 Sig Bn 86 Sig Bn 504 Sig Bn



Adington, VA

2AB Sig Ntwk Opns Ft Bragg, NC



Ft

112Sig B Ft Bragg, N



Network Enterprise Technology Cmd / 9th Army Sig Cmd Ft Huachuca, AZ



3 Sig Bde Ft Hood, TX 16 Sig Bn 57 Sig Bn 1114 Sig Bn



1Cav Sig Ntwk Opns Ft Hood, TX



4 ID Sig Ntwk Opns Ft Hood, TX



3 ID Sig Ntwk Opns Ft Stewart, GA



67 Sig E 56 Sig E



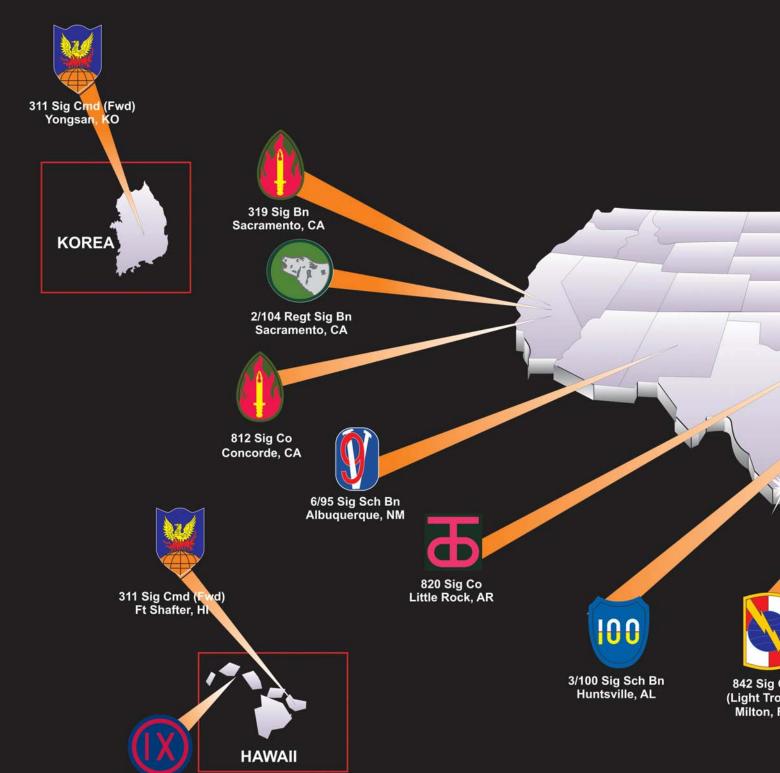
**US Army** Signal Activity Miami, FL

JCSE MacDill AFB, FL



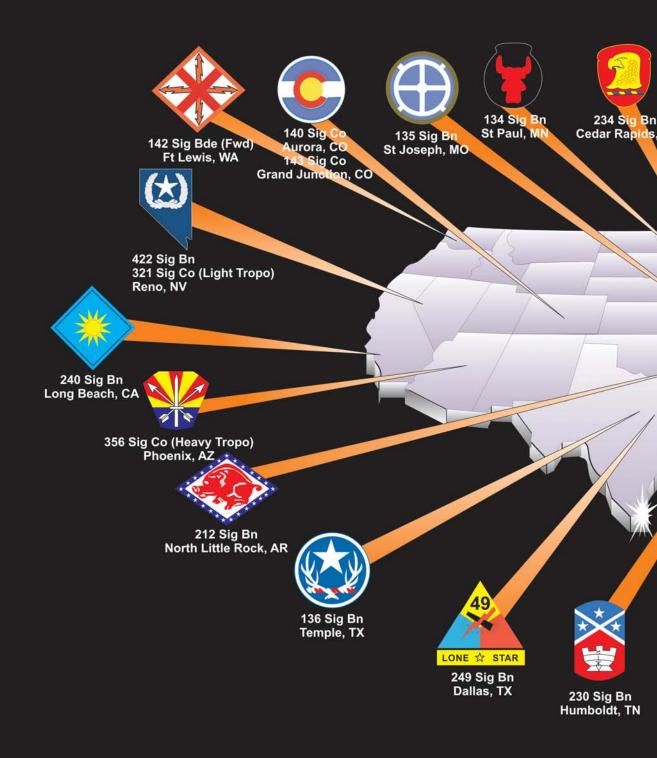


804 Sig Co Ft Shafter, HI

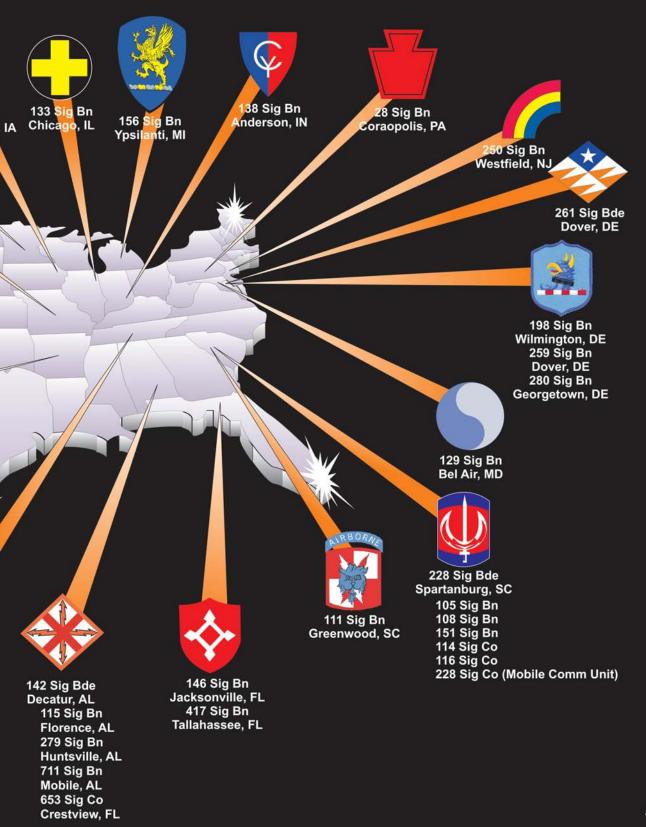


# Reserve 335 Sig Cmd (Fwd) Qatar 4/84 Sig Sch Bn Indianapolis, IN 3/98 Sig Sch Bn Providence, RI Qatar 392 Sig Bn Tobyhanna, PA 305 Sig Co (Heavy Tropo) 3/80 Sig Sch Bn Scranton, PA 311 Sig Cmd Ft Meade, MD 558 Sig Co Kings Mill, OH 301 Sig Co Ft Pickett, VA 982 Cbt Cam Co Wilson, NC 3/108 Sig Sch Bn Ft Jackson, SC 335 Sig Cmd East Point, GA 331 Repro Det **518 TIN Co** Ft Gordon, GA 359 Sig Bde Ft Gordon, GA **PUERTO RICO** 324 Sig Bn 35 Sig Bn Ponce, PR 807 Sig Co





# Army National Guard



## **Warrant Officers**

Warrant officers are a small, elite and specialized corps of military professionals. Commanders rely on warrant officers as their experts on the ground who can be counted on to get the job done no matter what. Warrants are officers with all the rights, privileges and prestige that accompany higher levels of responsibility and leadership. The Signal Regiment has four warrant officer military occupational specialties in all three components, with a total population of around 941 men and women.

Opportunities exist for Network Management Technician, MOS 250N; Information Management Technician, MOS 251A; Signal Systems Support Technician, 254A and Senior Signal Systems Technician 255Z. Warrants are eligible for retirement after completing 20 years active federal service; however, warrants now have the option of serving up to 30 years of active warrant officer service or to age 62, whichever comes

first. Promotion time-in-grade has been accelerated to Chief warrant officer three, four and five. Chief warrant officers two, three and four will normally be promoted when they have five years time-in-grade.

Warrant officers receive military education at four levels as they progress through the ranks: Warrant Officer Basic Course as a warrant officer one; Warrant Officer Advanced Course on promotion to chief warrant officer three; Warrant Officer Staff Course at promotion to chief warrant officer four; and the Warrant Officer Senior Staff Course at chief warrant officer five. Warrant Officers are authorized civilian degree completion up to a bachelor's degree, and some jobs are coded for master's degree programs. Warrant Officers are also authorized Training with Industry (TWI), a program that sends an officer to work in civilian industry with a follow-on tour using the training and experience gained in TWI. Outstanding Signal noncommissioned officers who are career professionals, who enjoy serving their country, who are seeking better pay, advancement, training opportunities, and the chance to lead the most technological Army in the world into the future may apply for warrant officer appointment. For more information, contact CW5 Wayne H. Jensen Jr. at DSN 780-6545 or commercial (706) 791-6545; email atzhpoo@gordon.army.mil.

The Signal experience

CW5 Wayne H. Jensen Jr. MOS 251A

Bachelor of Science in Information Systems Management University of Maryland University College

Signal Warrant Officer Proponent Manager U.S. Army Signal Center & Fort Gordon Fort Gordon, Georgia

"The Signal Center is the single point of contact for personnel proponent matters affecting the Signal Regiment within the eight personnel lifecycle management functions: structure, acquisition, individual training and education, distribution,

deployment, sustainment, professional development and separation. My role as the Proponent Manager for all four Signal warrant officer specialties is to manage the accessions program; review and update force structure documentation and modifications; review and update all warrant officer personnel regulations and pamphlets; and advise the Regimental Chief Warrant Officer and Chief of Signal on all matters relating to Signal warrant officers. I have been fortunate enough to have had a wide variety of Information Management positions in 27 years of Army Service. Every assignment has provided me the opportunity to grow in a challenging



Chief Jensen leads a warrant officer develpment workshop.

and rewarding environment of rapidly changing technology in the Signal field; and the chance to work with the superb caliber of Active, Reserve and National Guard soldiers and DoD civilians in the "Army of One".

## **Enlisted Section of Regiment**

The enlisted portion of the Signal Regiment is the largest and most diverse. Enlisted Soldiers serve in a number of military occupation specialties (MOS). These MOSs are grouped together into one career management field, Communication and Information Systems Operations.

There are three areas of concentration: Visual Information Operations; Signal Operations; and Information Operations. Outlined below is a summary of the overall functions performed in these areas.

Visual Information Operations consists of four MOSs: 25M, Multimedia Illustrator; 25R, Visual Information Equipment Operator-Maintainer; 25V, Combat Documentation/ Production Specialist; and 25Z, Visual Information Operations Chief. This area of concentration focuses on still photography, video, computer-controlled video switches, audio mixers/controls, closed circuit systems, visual imagery satellite equipment, broadcast and collection. Television production and distribution equipment creates visual information products supporting combat documentation, psychological operations, military intelligence, medicine, public affairs, training and other functions supporting Army, joint and combined operations.

Related civilian occupations include illustrator, motion-video photographic equipment supervisor, television and radio repairer, television equipment operator, still photographer, aerial photographer, recording engineer and audiovisual production specialist, broadcast engineer.

Signal Operations consists of 10 MOSs: 25C, Radio Operator-Maintainer; 25F, Network Switching System Operator-Maintainer; 25L, Cable System Installer-Maintainer; 25P, Microwave Systems Operator-Maintainer; 25Q, Multichannel Transmission Systems Operator-Maintainer; 25S, Satellite Communication Systems Operator-Maintainer; 25T, Satellite/Microwave System Chief; 25U, Signal Support Systems Specialist, 25W, Telecommunications Operations Chief; and 25X, Senior Signal Sergeant.

The Signal Operations area of concentration is the most diversified of the three concentrations. It encompasses single-channel high frequency radio, message preparation and transmission, multichannel communications, troposphere scatter communications, microwave and satellite



The Signal Regiment depends on its enlisted Soldiers to keep communications flowing; here a noncommissioned officer performs loop checks in a line-of-sight relay. systems, network and packet switching systems, combat net radio interface and digital group multiplexer. Soldiers in this area additionally troubleshoot, maintain, assist and train at unit level for automation and communications systems and Signal support equipment.

Related civilian jobs include broadcast engineer, central office operator, radio mechanic, electrical power lines installer/repairer, telephone and cable-television line installer, computer-peripherals equipment operator, radio officer, general communications superintendent, communications electronics supervisor, electronics inspector, telecommunications specialist, electronic equipment repairer and radio electronics communications equipment supervisor.

Information Operations consists of three MOSs: 25B, InformationSystemsOperator-Analyst, 25D, Telecommunications Operator-Maintainer; and 25Y, Information Systems Chief.

Soldiers in the Information Operations area of concentration are the automation and computer network specialists. They install, manage and maintain the Army's varied information systems, coordinating the communications interface required to ensure network access and continuity. They provide technical advice and assistance to other automation equipment operators regarding system initialization, application principles, capabilities, limitations, interfaces and protocol troubleshooting. They operate and maintain digital message switching systems, computer terminals and associated communications security devices.

Related civilian jobs include programmer-analyst, system programmer, machineservicer, electronics-computer subassembly supervisor, electronics inspector, electronic digital computer mechanic, computer operator, computer peripheral operator and cryptographic-machine operator.

Enlisted jobs in the Signal Regiment are changing rapidly to supply the latest technology in digital communications. Slow, human interface information handling in the form of books, magazines, newspapers and videocassettes is becoming an instantaneous and inexpensive transfer of electronic data moving at the speed of light. The Army's digitization process is a formidable challenge for the Signal Regiment, but achievable. We are additionally a Joint Warfighter branch; our platforms interconnect all military forces: Army, Navy, Air Force and Marine Corps including both Active and Reserve component forces. All military services are globalizing through digitization as technology makes all our forces interactive.

Opportunities for a Signal Soldier in today's Army are endless. We continually fielding technology that will better support our warfighting Army. You

will have the ability to learn and grow professionally and the opportunity leadership skills that will serve you well in whatever career path you choose to take. We are looking for enthusiastic and dedicated young Americans to serve with us.

Come join us.

Signaleers use the integrated systems control center to provide situation awareness to warfighters via several information feeds. ISYSCON is part of the Army's future digitized force. Some-times things are done the old-fashioned way, however. Enlisted Soldiers go anywhere in the world, doing whatever it takes to set up commo, like this Soldier climbing a tree to string





## The Signal experience



"... you only have one split second to put all that (Signal training) into practice. I was terrified, but we all had a job to do."

-- SSG Robert Barnes

SSG Robert Barnes 25C Special Operations Communications Assemblage (SOCA) team chief Company C, 112<sup>th</sup> Signal Battalion Fort Bragg, N.C.

SOCA team chief Operation Enduring Freedom/Task Force K-Bar Khowst, Afghanistan

"It was the night of March 19, 2002, and the airfield in Khowst, Afghanistan, was under attack. SGT Jesse Janicek, SPC Justin Bandura and I had been supporting a Special Forces company's advance operating base with single ultra-high-frequency tactical satellite and high-frequency radio communications. For an hour of intense combat, the Special Forces Soldiers and my SOCA team battled Taliban and Al-Qaeda fighters who were trying to capture the airfield so they could destroy the logistics and supply area our Special Forces units were using.

"I had to dodge gunfire to reposition two communication antennas in the dark. After I repositioned the antennas, I requested A-10 and AC-130 Spector gunship close air-fire support. The

AC-130s and A-10s responded quickly in attacking the AI-Qaida and Taliban machinegun emplacements and 107mm mortar positions. Without tactical-satellite communications from our PSC-5 Spitfire radio, the fight on Khowst Airfield between our Special Forces and the terrorists wouldn't have been decisive. "All the training in the world doesn't prepare you. Well, it prepares you, but you only have one split second to put all that into practice. I was terrified, but we all had a job to do."

SSG Barnes received a Bronze Star medal with "V" device for his actions. SGT Janicek and SPC Bandura received Army Commendation Medals with "V" devices. The "V" device on these medals signifies valor.

## The Signal experience

1LT Erik F. Melendez Reserve Officer Training Corps University of Nevada Las Vegas Bachelor of Arts in Workforce Education

Transmission Platoon Leader 1<sup>st</sup> Platoon, C Company, 86<sup>th</sup> Signal Battalion, 11<sup>th</sup> Signal Brigade Operation Iraqi Freedom, Baghdad, Iraq

"It was 130 degrees as my convoy traveled along the six-lane highway outside of Fallujah. Everyone was caught off guard when the explosion occurred; the situation was tense as the heat and debris enveloped the convoy vehicles. Quickly I scanned the horizon searching for anything out of the ordinary as I ordered my gunner to search and destroy the attackers. We were two hours into my convoy in October 2003 when I was hit by an improvised explosive device (IED). I stomped on the gas and raced through the kill zone just like we had rehearsed many times before. Understanding our objectives and the risks involved, we remained alert,

regained our composure, and moved on. That day God was on our side. Due to the intensive training prior to the convoy, the Soldiers reacted instinctively and ringing in the ears was the only battle scar the Soldiers received from this engagement. In Iraq, I served as the platoon leader for 1st Platoon, C Company, 86th Signal Battalion. Our mission was to provide satellite, line-of-sight and troposphere communications equipment to support key headquarters during Operation Iraqi Freedom. I led many convoys logging more than 10,000 miles in the most dangerous areas in Iraq. The experience I gained was invaluable."

SPC Cynthia Caffrey 25R audiovisual maintainer, operator and repairer Audiovisual specialist, HACN-TV2, 30th Signal Battalion, 516th Signal Brigade Schofield Barracks, Hawaii

Videographer/historian Task Force Eagle 11 Tuzla-Main Bosnia-Herzegovina

"I was chosen to document 25th Infantry Division (Light) Soldiers at Task Force Eagle 11. I was accompanied by 1/14 Infantry Brigade Soldiers as they conducted their daily foot patrols throughout many cities and villages. While on these patrols, I was able to visually document (video) the interaction between the Soldiers and the local Bosnian and Serbian people, and I was able to tap into the mindset, attitude and way of life of the local people. I also went to a small Bosnian elementary school, which taught students in grades kindergarten through eighth grade. I was able to document the impact as Soldiers from the aviation brigade came together to build a desperately



needed playground for the students. I was also able to crystallize the development of interpersonal relationships between 25th ID(L) Soldiers and Bosnian

youths as they gathered for a recreational game of soccer.
"I also journeyed to a Serbian elementary school where soldiers of the 25th ID(L) medic team were conducting a medical-capabilities exercise. I documented footage of elementary-school students receiving their second series of immunizations.



Signal Soldiers' greatest achievement in Bosnia has been maintaining reliable, quality communications through personnel and equipment changeovers, bad weather and political turmoil. Here 7th Signal Brigade Soldiers check their connections in a shelter during Operation Joint Guard.

The children's curiosity about me and my video equipment was intriguing as several children followed my every move.
"The 25th ID(L) Public Affairs Office and I are editing my raw footage into a command-informational video for MG Eric Olsen, commander of 25th ID(L) and U.S. Army Hawaii."

\* The Signal Regiment is the team of Soldiers and civilians, past and present, dedicated to providing and managing information systems and services for warfighters wherever assigned, regardless of other regimental or organizational ties. The Signal Regiment encompasses more than just the traditional Signal Corps. It extends be-yond organizations or activities with defined boundaries and hierarchical relationships. The Signal Regiment is people bound together in a life-long relationship by a rich heritage, a common purpose and a shared vision for the future.

The Signal Regiment was one of the first combat support branches to organize under the Army's regimental system. The regimental system's purpose is "to enhance combat effectiveness through a framework that provides the opportunity for affiliation; develops loyalty and commitment; fosters a sense of belonging; improves unit esprit; and institutionalizes the warfighting ethos."

The Signal Regiment was formed June 1, 1986, under the whole branch regimental concept. This means all soldiers are affiliated with the regiment in a lifelong relationship - no matter where Signal Soldiers are assigned or how often they move, their professional home will always be Fort Gordon, Ga., and their regiment will always be the Signal Regiment.

We also use the term" Regiment" to be more inclusive of individuals is more than just the Soldiers, warrants, and officers who are in the Signal Corps. Within our Regiment we also include officers who may have as a basic branch Infantry or Aviation but whohave now chosen to be designated as functional area24 and 53 officers. We also include those Department of the Army civilians who support the

Regiment in any number of ways. The power of the Signal Regiment to support our Army is much greater than the sum of its parts.

Since the U.S. Army Signal Center and Fort Gordon is the Signal Regiment's regimental home, the Signal Center's commanding general is the Army's Chief of Signal. He/she's the regimental commander, and the Signal Center's command sergeant major is the regi-



Signal Towers is the Signal Center's headquarters at Fort Gordon, Ga., home of the Regiment.

mental sergeant major. The Office Chief of Signal is the operational headquarters for regimental activities.

The Signal Regiment has a coat of arms whose origin can be traced to the 1860s and to Major Albert J. Myer, the first Chief Signal Officer. The Signal Regiment also has a distinctive insignia, worn by all Signal Soldiers on the Army green, blue and white uniforms. Our insignia serves as a symbol of corps affiliation for Signal Soldiers worldwide.



The Signal Regiment's distinctive insignia is worn by Soldiers and civilians affiliated with the Regiment. The insignia is a gold eagle holding in his talons a golden baton, from which descends a red Signal flag. Around the edges is the motto, "Pro Patria Vigilans," which means "Watchful for the Country."



Early in the morning at the Signal Center, after a night on bivouac, 2LT Diane Klein and other Signal Officer Basic Course students are inducted into the Signal Regiment in a pinning ceremony, part of the process in formally affiliating and welcoming newly commissioned and branch detailed officers into the Regiment.

To formalize affiliation, and to welcome them to the regiment, newly commissioned or branch detailed officers are inducted into the Signal Regiment after they complete the Signal Officer Basic Course or Signal Basic Branch Qualification Course. The Regimental Induction process consists of a class regimental run; signing the class roster for inclusion in the Signal Regiment's lieutenants' register; and the pinning ceremony. At the induction ceremony's end, the lieutenants are authorized the Signal Regiment's distinctive insignia.

# Signal Corps Regimental Association

To further esprit de corps and promote the Signal Regiment, the Signal Corps Regimental Association was established at the Signal Center, with chapters worldwide. SCRA is open to all members of the Regiment: active or reserve officers, warrant officers and



A run with Regimental colors is part of the Regimental Induction process.

enlisted Soldiers; Army civilians and industry partners; and others affiliated with the Signal Regiment.

SCRA offers its members close continued identification with the Regiment as well as camraderie with fellow members. SCRA's objectives include preserving the history and traditions of our Regiment and recognizing accom-

plishments of people who have made significant contributions with Order of Mercury and Wahatchee awards or Brevet Colonel appointments.

SCRA also maintains an official roster of members, publishes a quarterly newsletter, hosts SCRA functions and supports Regimental and chapter activities.

## The Signal experience

1LT Kendra Kantrell Allen Reserve Officers Training Corps Augusta State University Bachelor of science in kinesiology

Selectee, All-Army softball and Armed Forces championship "I usually serve as operations officer for 293rd Signal Company, 36th Signal Battalion, at Camp Carroll, Korea. I recently had the opportunity, however, to be part of the All-Army and

As a part of her Signal experience, Allen was chosen to be a part of the All-Army and All-Armed Forces softball teams.

All-Armed Forces softball teams as the starting pitcher for both teams. My Army team won a silver medal, and the Armed Forces team became national champions. I also keep up my standards as a Soldier; I scored 296 on my Army Physical Fitness Test and completed six hours of my master's degree."

CPT Jonathan L. Ballard Platoon Leader, Satellite Communications Team Operation Enduring Freedom, 385<sup>th</sup> Signal Company, Kuwait, and Bagram, Afghanistan Reserve Officers Training Corps Western Kentucky University, B.A., general studies

"I was a Signal Platoon Leader in the 385th Signal

Company in Kuwait from March 2001 to March 2002. After Sept. 11, we knew it was just a matter of time before we were called upon to deploy to either Afghanistan or Iraq. In late December that call came. With less than 48 hours to prepare, a team of five of my Soldiers and I deployed an AN/TSC 93C Satellite Communications Shelter to Bagram Airfield in Afghanistan. We were asked to provide a secure link for the telephones and internet services for all the Special Operations Units that had secured the airfield and were beginning to build up the city's infrastructure. Those tactical and technical experiences created a solid foundation of leadership that guides me now as a company commander. Presently, I am responsible for training the initial entry (AIT) Signal Soldiers who are deploying to support the war effort."



Since its creation on June 21, 1860, the U.S. Army Signal Corps has fulfilled the Army's communications needs. Major Albert James Myer, a former Army surgeon and the first Chief Signal Officer, developed a unique and practical visual communications system for the Army called "wigwag." Simple, mobile, and lightweight, the wigwag system used flags during the day and torches at night.

Wigwag proved well suited for New Mexico's rugged terrain during the Navajo Campaign of 1860-1861. Colonel Thomas Fauntleroy, Myer's commander, said, "[Wigwag] demonstrated not only the practical usefulness of field signals, but that they can be used under any of the contingencies of frontier warfare."

While visual signaling was a main-

stay of tactical communication in the field during the Civil War, the Army also used the electric telegraph. The U.S. military telegraph employed civilian operators, its supervisors received commissions in the Quartermaster Corps, and Secretary of War Stanton controlled it. Myer unsuccessfully tried to gain con-



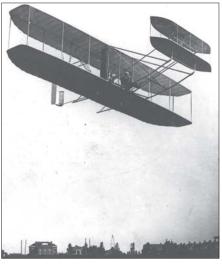
Wigwag was the first communications "system."

trol of the U.S. military telegraph and instead developed a mobile telegraph train that employed the Beardslee electric telegraph to improve communication in the field.

These telegraph trains consisted of two wagons, copper wire and iron lances for stringing temporary field lines called "flying telegraph line." Myer contracted with a civilian company to construct the telegraph using an alphabetic dial indicator and galvanic battery to transmit messages. Myer's contract began a tradition of civilian industry and military cooperation for developing Signal equipment that continues to this day.

From 1870-1891, the Signal Corps established and operated the nation's first weather service. During contingencies such as the Spanish-American War and Philippine Insurrection, the Signal Corps continued innovations in Army communications

such as combat photography, telephone, an improvised telegraph switchboard and renewed use of balloons. From 1900-1903, signalmen constructed the Washington-Alaska Military Cable and Telegraph System. However, traditional land-wire telegraph proved to be ineffective in the Alaskan climate, so Chief Sig-Officer nal Adolphus Greely



Orville Wright tests the military's first airplane over Fort Myer, Va., in September 1908.

introduced wireless telegraph to Alaska. Then in 1904, signalmen laid a 1,300-mile cable linking Sitka, Alaska, and Washington, D.C., creating the first direct link between the Alaskan system and commercial telegraph in the United States.

The Signal Corps pioneered U.S. military aviation in 1908, when the Wright brothers made initial tests flights of the Army's first aircraft, which was built to Signal Corps specifications. U.S. aviation capability remained a Signal Corps responsibility until 1918.

Development in Signal equipment continued during the two world wars. During World War I, the Signal Corps experimented with radio and cooperated with the communications industry to perfect radio tubes. A new Signal Corps Laboratory at Camp Vail, N.J. (later renamed Fort Monmouth), developed small aircraft radiotelephones, the superheterodyne circuit (vital to the development of AM and FM radio) and radar. Signalmen used pigeons extensively for frontline communications in World War I. Before and during World War II, the Signal Corps was heavily involved in developing radar. A Signal Corps mobile radar set detected the Japanese aircraft that bombed Pearl Harbor. Development of tactical FM radio continued and led to the production of reliable, mobile, and easy-to use equipment.

At the beginning of the Korean War (1950-1953), existing Signal equipment was old, used and in short supply. Cable was unreliable and telephone not practical. Mountainous terrain hindered signals, and relay trucks were easy targets for the enemy. To improve communications, the Signal Corps introduced new equipment such as very high frequency line-of-sight radio. It was flexible and mobile – it could keep up with the infantry's rapid moves – and provided communication over the mountains, rivers and enemy. It could carry teletype messages. One lesson learned from Korea was that the Signal Corps needed a speedier, more reliable, protected and stable communications system that could withstand a single breakdown. For this reason the Signal Corps abandoned the battlefield's Single Axis Communica-

tions System for the Army Area Communications System, and later the Area Common User System.

Much of this equipment was used in Vietnam, but there were problems. The Signal Corps faced the problem of unreliable and inadequate radio circuits linking Southeast Asia and Washington. Troops carried equipment that was too heavy and of poor quality. The Army relied heavily on high frequency radio that could be easily jammed or affected by dust, overheating and inadequate frequencies.

That era's improvements in Army communications included such innovations as troposphere-scatter radio trunks. Unlike conventional microwave relay links requiring line-of-sight, tropo passed over extensive distances of enemy terrain.



A Signal Corps Soldier leans over a cliff to repair telephone lines in Korea in January 1951.

Tropo answered the demand for high-quality telephone and message circuits, and enabled multiple circuits to connect locations 200 miles apart. For the first time in combat, the Signal Corps used an experimental satellite ground terminal linking Vietnam, Hawaii and Washington. This system supplied the first reliable, high-quality communications in and out of Vietnam.

Modernization efforts shot ahead in the 1980s to lead the Army into the 21st century. Science and technology shaped the Signal Corps' destiny; innovations and equipment such as satellites, fiber-optic cable, digitization, computers and connectivity were just be-

ginning to yield increased mobility, durability, increased frequency selection and overall system reliability.

The Signal Corps was a pioneer in the satellite and space age. Project Diana in 1946 chronicled Signal Corps' scientists' efforts to use the heavens for new frontiers in communications. Using a WWII-era

radar, the scientists bounced a radar signal off the moon, proving that humans could communicate electronically through the ionosphere into outer space. In December 1958, SCORE I, the world's first communications satellite, carried a Signal Corps-developed communications package into space.

However, since 1962, the Army's primary responsibility has been satellite ground terminals, so the Signal Corps developed satellite communication terminals to be reliable, mobile, quick to set up, unlimited by terrain and secure from enemies. These systems are the primary focus of the Signal Regiment's future.

Other innovations have included the tactical Internet, a router-based data and voice network using commercial-standard Internet protocols and designed to pro-



Soldiers train on avionics-equipment maintenance, formerly a Signal Corps responsibility, in the 1970s.

vide a seamless flow of digitized information from the foxhole to the brigade commander. New tactical radios have brought better command and control at battalionand-below level. New communications architecture has meant better command to division and corps areas, and it's interoperable with existing U.S. and NATO tactical and strategic communications systems, including tactical satellites.

Battlefield communications have transformed immensely from the wigwag flag, torches and electric telegraph. The battlefield of the 21st century will continue to offer challenges to be overcome as the Army transforms. The Signal Regiment leads that transformation by the development of equipment, doctrine, and most importantly, Soldiers who provide the best communications possible for the U.S. Army.



Soldiers discuss battle operations in a tactical operations center at Twin Bridges, Korea, during Exercise Foal Eagle. Battalion control centers, heir to TOCs, and TOCs are the nerve centers for Signal battle operations.

\* "On the battlefield of the future, enemy forces will be located, tracked and targeted almost instantaneously through the use of data links, computer-assisted intelligence evaluation and automated fire control. I see battlefields on which we can destroy anything we locate through instant communications and almost instant application of highly lethal firepower." -- GEN William Westmoreland, 1969



A Soldier seeks a location from the enhanced position-location reporting system.

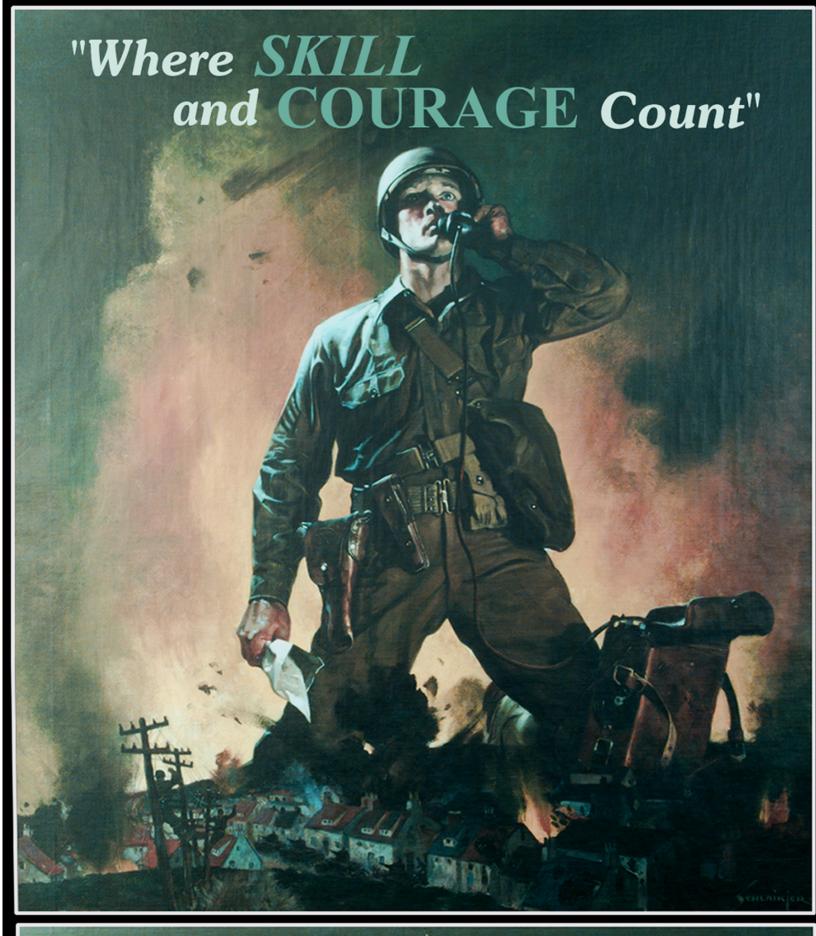


Combat video taken on the battlefield provides commanders with images and information they use to make decisions. The Army's use of combat camera products for situation and battlefield awareness grew in the 1990s and into the 21st Century.

Website (Regimental Division, Fort Gordon, Ga.): http://www.gordon.army.mil/ ocos/rdiv

## The Signal experience









Commander

U.S. Army Signal Center ATTN: ATZH-POM

Fort Gordon, Georgia 30905 DSN: 780-7204/7254

COMM: (706) 791-7204/7254 EMAIL: mcelmurj@gordon.army.mil or

woodn@gordon.army.mil

On the web: Regimental Division -www.gordon.army.mil/ocos/rdiv/ Army Communicator --www.gordon.army.mil/AC/ "Go Signal" --

www.gordon.army.mil/ocos/rdiv/GoSignal.asp

# SISIAI Siment

